WHAT IS CLAIMED IS:

1   1.   A method for processing input data comprising:

2   receiving multiple input rows to be loaded into a first structure;

3   processing each input row of the multiple input rows to classify each input row as

4   one of an insert row and an update row, wherein input duplicates are stored in the first

5   structure and index entries for the input duplicates are stored in a second structure; and

6   after the multiple input rows have been processed,

7   automatically re-applying the input duplicates to the first structure; and

8   processing the index entries stored in the second structure.

1   2.   The method of claim 1, further comprising:

2   identifying duplicates in the index entries in the second structure; and

3   storing the identified duplicates in a third structure.

1   3.   The method of claim 1, wherein the processing of the input data further

2   comprises order insensitive processing of input duplicates.

1   4.   The method of claim 1, wherein the processing of the input data further

2   comprises order sensitive processing of input duplicates.

1   5.   The method of claim 1, wherein automatically reapplying input duplicates

2   comprises:

3   removing input duplicates from the output table.

1   6.   The method of claim 1, further comprising:

2   when an input duplicate is characterized as an update row, updating a

3   corresponding row in the output table.

1   7.   A method for processing input data, comprising:

2   loading one or more input rows into an output table, wherein index entries for

3   input rows are stored in a first structure and discarded input rows are stored in a third

4   structure;

5   periodically interrupting the loading of the one or more input rows to perform an

6   index merge, wherein input duplicates for which corresponding index entries in the first

7   structure are not added to an index are stored in a second structure;

8   determining whether to add data for one or more discarded input rows in the third

9   structure to the second structure;

10   when it is determined that the data for one or more discarded input rows in the

11   third structure are to be added to the second structure, adding the data for the discarded

12   input rows to the second structure; and

13   automatically reapplying input duplicates and discarded input rows for which data

14   is stored in the second structure to the output table.

1   8.   The method of claim 7, wherein determining whether to add the data for

2   one or more discarded input rows in the third structure to the second structure further

3   comprises:

4   searching for discarded input rows in the third structure with corresponding rows

5   in the second structure and in the output table to identify potential input duplicates; and

6   applying conditions to the discarded input rows that are potential input duplicates.

1   9.   The method of claim 7, wherein automatically reapplying input duplicates

2   further comprises:

3   removing the input duplicates from the output table.

1   10.   The method of claim 7, wherein the processing of the input data further

2   comprises at least one of order sensitive processing and order insensitive processing.

1   11.   An article of manufacture including a program for processing input data

2 wherein the program causes operations to be performed, the operations comprising:

3   receiving multiple input rows to be loaded into a first structure;

4   processing each input row of the multiple input rows to classify each input row as

5 one of an insert row and an update row, wherein input duplicates are stored in the first

6 structure and index entries for the input duplicates are stored in a second structure; and

7   after the multiple input rows have been processed,

8   automatically re-applying the input duplicates to the first structure; and

9   processing the index entries stored in the second structure.

1   12.   The article of manufacture of claim 11, wherein the operations further

2 comprise:

3   identifying duplicates in the index entries in the second structure; and

4   storing the identified duplicates in a third structure.

1   13.   The article of manufacture of claim 11, wherein the operations for

2 processing of the input data further comprise operations for order insensitive processing of

3 input duplicates.

1   14.   The article of manufacture of claim 11, wherein the operations for

2 processing of the input data further comprise operations for order sensitive processing of

3 input duplicates.

1   15.   The article of manufacture of claim 11, wherein the operations for

2 automatically reapplying input duplicates further comprise:

3   removing input duplicates from the output table.

1   16.   The article of manufacture of claim 11, wherein the operations further

2 comprise:

3   when an input duplicate is characterized as an update row, updating a

4 corresponding row in the output table.

1   17.   An article of manufacture including a program for processing input data,

2 wherein the program causes operations to be performed, the operations comprising:

3 comprising:

4   loading one or more input rows into an output table, wherein index entries for

5 input rows are stored in a first structure and discarded input rows are stored in a third

6 structure;

7   periodically interrupting the loading of the one or more input rows to perform an

8 index merge, wherein input duplicates for which corresponding index entries in the first

9 structure are not added to an index are stored in a second structure;

10   determining whether to add data for one or more discarded input rows in the third

11 structure to the second structure;

12   when it is determined that the data for one or more discarded input rows in the

13 third structure are to be added to the second structure, adding the data for the discarded

14 input rows to the second structure; and

15   automatically reapplying input duplicates and discarded input rows for which data

16 is stored in the second structure to the output table.

1   18.   The article of manufacture of claim 18, wherein the operations for

2 determining whether to add the data for one or more discarded input rows in the third

3 structure to the second structure further comprise:

4   searching for discarded input rows in the third structure with corresponding rows

5 in the second structure and in the output table to identify potential input duplicates; and

6   applying conditions to the discarded input rows that are potential input duplicates.

1   19.   The article of manufacture of claim 18, wherein the operations for

2   automatically reapplying input duplicates further comprise:

3   removing the input duplicates from the output table.

1   20.   The article of manufacture of claim 18, wherein the operations for

2   processing of the input data further comprise at least one of order sensitive processing and

3   order insensitive processing.

1   21.   A computer system having at least one program for processing input data

2   comprising:

3   receiving multiple input rows to be loaded into a first structure;

4   processing each input row of the multiple input rows to classify each input row as

5   one of an insert row and an update row, wherein input duplicates are stored in the first

6   structure and index entries for the input duplicates are stored in a second structure; and

7   after the multiple input rows have been processed,

8   automatically re-applying the input duplicates to the first structure; and

9   processing the index entries stored in the second structure.

1   22.   The computer system of claim 21, further comprising:

2   identifying duplicates in the index entries in the second structure; and

3   storing the identified duplicates in a third structure.

1   23.   The computer system of claim 21, wherein the processing of the input data

2   further comprises order insensitive processing of input duplicates.

1   24.   The computer system of claim 21, wherein the processing of the input data

2   further comprises order sensitive processing of input duplicates.

1   25.   The computer system of claim 21, wherein automatically reapplying input

2 duplicates comprises:

3   removing input duplicates from the output table.

1   26.   The computer system of claim 21, further comprising:

2   when an input duplicate is characterized as an update row, updating a

3 corresponding row in the output table.

1   27.   A computer system having at least one program for processing input data,

2 comprising:

3   loading one or more input rows into an output table, wherein index entries for

4 input rows are stored in a first structure and discarded input rows are stored in a third

5 structure;

6   periodically interrupting the loading of the one or more input rows to perform an

7 index merge, wherein input duplicates for which corresponding index entries in the first

8 structure are not added to an index are stored in a second structure;

9   determining whether to add data for one or more discarded input rows in the third

10 structure to the second structure;

11   when it is determined that the data for one or more discarded input rows in the

12 third structure are to be added to the second structure, adding the data for the discarded

13 input rows to the second structure; and

14   automatically reapplying input duplicates and discarded input rows for which data

15 is stored in the second structure to the output table.

1   28.   The computer system of claim 27, wherein determining whether to add the

2   data for one or more discarded input rows in the third structure to the second structure

3   further comprises:

4   searching for discarded input rows in the third structure with corresponding rows

5   in the second structure and in the output table to identify potential input duplicates; and

6   applying conditions to the discarded input rows that are potential input duplicates.

1   29.   The computer system of claim 27, wherein automatically reapplying input

2   duplicates comprises:

3   removing the input duplicates from the output table.

1   30.   The computer system of claim 27, wherein the processing of the input data

2   further comprises at least one of order sensitive processing and order insensitive

3   processing.